Hydrogen Hopes
74085 DVD
30 min S 2005 McIntyre Films
We've all heard of hydrogen as the fuel of the future, but what will it take to get there from here? How can we create hydrogen from renewable sources like the sun - and how do we store it safely once we've got it?
No Other Versions Available

Properties of Compounds
546/.8 74636 DVD
25 min JIS 2004 Distribution Access
How do a mere 100 or so elements produce the millions of different compounds and mixtures that make up our world? In Properties of Compounds, viewers see that chemical bonds are the key to understanding how elements combine. The differences between ionic and covalent bonds are clearly presented using vivid graphics and dynamic footage. Students see how valence electrons interact among atoms to form compounds, and learn how simple Lewis structures can help describe how easily an element will react. Students explore the significance of the arrangement of the elements and are shown how to predict the behavior of an element from its position on the periodic table.
No Other Versions Available

Properties of Elements
546/.8 74637 DVD
23 min IS 2004 Distribution Access
Why are some elements highly reactive and others very stable? Why do elements in the same family have similar properties? Properties of Elements explores the connection between the atomic structure of an element and its properties. Students see how the behavior of the elements and the compounds they form is related to their valence shells—and learn that anything that affects the valence shell will affect the chemical and physical properties of the element. Viewers learn how to identify trends in properties based on the location of an element in the periodic table.
No Other Versions Available

Seeing the Scientific Light
73092 DVD
60 min S 2003 Kinetic Video Inc.
Spectroscopy is the measurement of the response of matter as it interacts with light. Its many uses extend beyond space to science, to weather monitoring, medical diagnostics such as MRI, household conveniences like the microwave oven and countless other facets of everyday life. This documentary examines the critical role spectroscopy plays in studying the nature, composition, history and future of the Universe.
No Other Versions Available

The World of Chemistry - Disk 1 and 2
74835 DVD
390 min S 1990 Visual Education Centre
Join with experts to observe chemistry in action and learn the laws and principles of this dynamic field. Computer technology and special effects place students in a front-row seat to observe many processes, even those that are too dangerous or impractical to experience directly. Working industrial and research chemists of all backgrounds serve as role models. The World of Chemistry is appropriate for students taking high school or college chemistry, from introductory to advanced levels, and is easily applicable to different teaching approaches. It includes physics and Earth science components, and is also valuable for teachers seeking to review the subject matter. Disk 1 contains: The World of Chemistry, Color, Measurement: The foundation of Chemistry, Modeling the Unseen, A Matter of State, The Atom, The Periodic Table, Chemical Bonds. Disk 2 contains: Molecular Architecture, Signals From Within, The Mole, Water, The Driving Forces, Molecules in Action.
No Other Versions Available

The World of Chemistry - Disk 3 and 4
74834 DVD
390 min S 1990 Visual Education Centre
Join with experts to observe chemistry in action and learn the laws and principles of this dynamic field. Computer technology and special effects place students in a front-row seat to observe many processes, even those that are too dangerous or impractical to experience directly. Working industrial and research chemists of all backgrounds serve as role models. The World of Chemistry is appropriate for students taking high school or college chemistry, from introductory to advanced levels, and is easily applicable to different teaching approaches. It includes physics and Earth science components, and is also valuable for teachers seeking to review the subject matter. Disk 3 contains: The Busy Electron, The Proton in Chemistry, The Precious Envelope, The Chemistry of the Earth, Metals, On the Surface. Disk 4 contains: Carbon, The Age of Polymers, Proteins: Structures and Function, The Genetic Code, Chemistry and the Environment and Futures.
No Other Versions Available